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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,186	07/21/2003	Thomas Martin Buckingham	NOES-0001-UT1	4727
22506	7590	06/14/2007		
JAGTIANI + GUTTAG 10363-A DEMOCRACY LANE FAIRFAX, VA 22030			EXAMINER FLETCHER III, WILLIAM P	
			ART UNIT	PAPER NUMBER
			1762	
			MAIL DATE	DELIVERY MODE
			06/14/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/623,186

Applicant(s)

BUCKINGHAM ET AL.

Examiner

William P. Fletcher III

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 26-41 is/are pending in the application.
- 4a) Of the above claim(s) 41 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 33-40 is/are allowed.
- 6) ☒ Claim(s) 26-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Amendment***

1. The compliant amendment and remarks, filed March 21, 2007, are noted with appreciation.
2. Claims 26-41 remain pending.

***Election/Restrictions***

3. To clarify the record, claim 41 remains distinct from claims 26-40, albeit for reasons different than those originally presented in the Office action mailed June 19, 2006.
4. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 26-40, drawn to a method of illuminating a rotary blade, classified in class 427, subclass 407.1.
  - II. Claim 41, drawn to a photoluminescent paint system, classified in class 428, subclass 411.1+.

The inventions are distinct, each from the other because of the following reasons:

5. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, the paint system can be used in a method of applying a photoluminescent coating to any surface other than a rotary blade.

6. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

7. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

8. Since Applicant's original election (7/18/2006) was made without traverse and since Applicant has voluntarily withdrawn claim 41 from prosecution (3/21/2007), the invention of claims 26-40 has been constructively elected by original presentation for continued prosecution on the merits. Accordingly, claim 41 remains withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Response to Arguments***

9. With respect to the prior Office action (10/4/2006):

A. The objection to the title is withdrawn in view of Applicant's amendment.

B. The rejection of claims 36 and 39 under 35 USC 112, 2<sup>nd</sup> Paragraph, is withdrawn in view of Applicant's amendment. Claims 36 and 39, as amended, are sufficiently definite.

C. The rejections of claims 26-32 are withdrawn. Gouterman teaches an extinction time on the order of minutes and neither teaches nor suggest the claimed extinction time of greater than or equal to 5.5 hours.

D. The rejections of claims 33-40 are withdrawn. It would not have been obvious to apply a top sealer coat to the paint of Gouterman as such would preclude oxygen quenching by the oxygen-sensitive luminescent film, thereby rendering Gouterman unsatisfactory for its intended purpose (MPEP 2143.01).

10. With respect to Applicant's comments beginning at page 11, line 20, of the remarks (3/21/2007):

A. The Examiner's evaluation of Applicant's amendment with respect to 35 USC 112, 1<sup>st</sup> and 2<sup>nd</sup> Paragraphs, in the Notice of Non-compliant Amendment (2/22/2007), was included as a courtesy to Applicant. The remarks were made in an advisory capacity as information Applicant may have wished to consider when drafting a compliant amendment.

B. Applicant's traversal of the indefiniteness of the limitation is noted but is not persuasive. The indefiniteness of the claims arises from the lack of support in the originally-filed disclosure for "an extinction time of greater than or equal to 5.5 hours." See the formal grounds of rejection, set-forth below.

***Claim Rejections - 35 USC § 112***

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claims 26-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

A. The newly-added limitation “an extinction time of greater than or equal to 5.5 hours,” is not fully supported by the specification as originally-filed. Applicant’s specification discloses that luminescence is visible through the 5.5 hour test period and “readily visible” thereafter. It is presumed, however, that the paint does, in fact, have an extinction time and, consequently, Applicant does not have support for the *any and all* extinction times encompassed by the “greater than” portion of the range. This lack of support calls into question the definiteness of the limitation as well (see below).

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 26-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. As noted above, Applicant does not have full support for the upper range of the claimed “greater than 5.5 hours” range. The MPEP admonishes that “[o]pen-ended numerical ranges should be carefully analyzed for definiteness” (MPEP 2173.05(c)(II)). In the instant application, the specification provides data only up to 320 minutes (5.3 h). Since, as noted above, it is unknown what maximum extinction time(s)

define(s) the invention, it is also unknown, by extension, which paints would and would not infringe the claim. The primary purpose of 35 USC 112, 2<sup>nd</sup> Paragraph, is to ensure that the scope of the claims is clear so that the public is informed of the boundaries of what constitutes infringement of the patent. Because the phrase "an extinction time of 5.5 hours" is such that one of ordinary skill in the art could not interpret the metes and bounds of the claim so as to understand how to avoid infringement, rejection under 35 USC 112, 2<sup>nd</sup> Paragraph is appropriate.

***Allowable Subject Matter***

15. Claims 33-40 are allowed.

16. The following is an examiner's statement of reasons for allowance: The prior art neither teaches nor suggests the claimed process in which the photoluminescent paint is coated with a sealer coat.

17. With respect to claims 26-32, while the newly-added limitation "an extinction time of greater than or equal to 5.5 hours," lacks support in the originally-filed specification, the prior art neither teaches nor suggests the claimed process in which the photoluminescent paint has such an extinction time.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

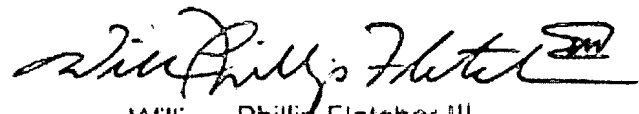
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

19. The prompt development of clear issues in the prosecution history requires that applicant's reply to this Office action be fully responsive (MPEP § 714.02). When filing an amendment, applicant should specifically point out the support for any amendment made to the disclosure, including new or amended claims (MPEP §§ 714.02 & 2163). A fully responsive reply to this Office action, if it includes new or amended claims, must therefore include an explicit citation (i.e., page number and line number) of that/those portion(s) of the original disclosure which applicant contends support(s) the new or amended limitation(s). Applicant's cooperation in this matter is acknowledged and greatly appreciated.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Fletcher III whose telephone number is (571) 272-1419. The examiner can normally be reached on Monday through Friday, 0900h-1700h.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



William Phillip Fletcher III  
Primary Examiner  
Art Unit 1762

June 4, 2007